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ABSTRACT

Results of the examination of teacher's manuals, grades one through four, that accompany a number of basal reading series used in schools in Staten Island, New York, indicated that although teacher's manuals included many phonic rules, none of the examined texts gave any utility or frequency data or cited any research studies to support the inclusion of the selected phonic rules. This discovery led to the decision to investigate seven undergraduate level texts used to teach reading methods courses in colleges and universities in the New York City metropolitan area to see if they adequately prepared and acquainted future teachers with the research available on the value and limitations of phonic generalizations. The study revealed that only two college texts included references to the major studies of T. L. Clymer (1963), M. H. Bailey (1967), and R. Emans (1967). Two texts cited other research studies. Each of the seven texts presented a number of phonic rules, yet did not give any utility data to support the usefulness of the rules presented. No studies after 1971 were cited, although none of the texts had been revised or published any earlier than 1975, and little overlap was found in the cautions presented in the texts for using phonic rules. (MKM)

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PHONIC GENERALIZATIONS--A SURVEY OF SEVEN
COLLEGE LEVEL READING
TEXTBOOKS

BY

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Submitted in Partial Fulfillment of the
Master of Arts Degree in
Reading Specialization

KEAN COLLEGE
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To My Husband
Charles

and My Children
Alexis, Amanda and Ryan

For their understanding and support throughout
the preparation of this paper

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In addition to my husband and children, several other people have been most helpful in the creation and completion of this paper. My grateful thanks go to my parents, Veronica and Alexander Krako, who came to babysit for days and even weeks whenever they were needed. Many other friends and relatives, too numerous to mention individually, also supported and encouraged me along the way. I would like to acknowledge their help babysitting and in securing the many basal texts and manuals as well as other materials which were needed to complete this paper.

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CHAPTER I

INTRODUCTION

STATEMENT OF THE PROBLEM

Are undergraduate level elementary teacher training texts adequately preparing future teachers to make appropriate decisions pertaining to the teaching of phonic generalizations as word attack methods?

SIGNIFICANCE OF THE PROBLEM

Many basal reading series used in elementary school reading programs introduce phonic generalizations which are supposed to help students decode unfamiliar vocabulary words. To justify the teaching of these rules it is advisable to determine how useful they are in helping to recognize and pronounce difficult words. Several basal readers do not present any research studies which would help determine the usefulness of the many generalizations presented within them. For this reason, then, it was necessary to look back to the college texts to see if this information was available. Only when teachers become aware of the studies presented on rule or generalization usefulness can they intelligently decide on the practicality of presenting the rule to the class. A college level teacher training course in reading should be the place where this information is disseminated. It is in the preparatory

stages of teaching reading that the most accurate and current theories concerning phonic generalizations should be examined and presented.

The information gathered in this study will be of value to college professors teaching undergraduate level courses concerned with the teaching of elementary reading methods courses and others interested in phonics teaching. It will encourage and enable the selection of texts which will most appropriately present the teaching of phonic rules or generalizations. It will also serve as a means of deciding whether or not to supplement the text's presentation of phonic generalizations with additional materials.

PURPOSE OF THE STUDY

The purpose of this study was to determine whether or not seven college texts used in teaching elementary school reading methods courses adequately prepare and acquaint future teachers with the research available on the value and limitations of phonic generalizations. The seven colleges or universities were chosen from both private and public schools in the Metropolitan New York City area. A determination was made upon completion of the study as to which texts presented the most current research concerning phonic generalizations and which ones did not.

STATEMENT OF THE HYPOTHESIS

College texts in reading are not adequately presenting research in the use of phonic generalizations as methods of word attack in teacher preparation courses on the elementary level.

ASSUMPTIONS AND LIMITATIONS

ASSUMPTIONS

The reseacher, for the purpose of this study, assumed that the material presented in each text concerning phonic generalizations was what was taught in the course using the text.

The recommendation made by Clymer (1963), that if a phonic generalization or rule is applicable 75 percent of the time or more it is useful to teach as a means of helping children decode unfamiliar words, was accepted by this researcher.

It was assumed that the Clymer (1963), Bailey (1967) as Emans (1967) phonic generalizations were valuable enough to be used to compare to those phonic generalizations found in the eight texts used in this study.

LIMITATIONS

This study did not examine or include generalizations used to determine syllabication and accent.

This study reviewed only one text used in a single

undergraduate course taught at one of the seven colleges or universities selected for this study.

There were no attempts made by this reseacher to judge or examine the college, university or professor teaching a course which used one of the seven selected texts.

There were no norms against which this study could be evaluated, nor were there any reliability criteria to compare with this study. The study, however, had content validity.

DEFINITION OF TERMS

GENERALIZATION

A generalization is defined as a principle or rule of phonics to which the pronunciation of words conforms. A student, through the use of a generalization, may be given a starting point for the pronunciation of unknown words. The words generalization, rule and principle may be used interchangeably.

UTILITY

Utility is defined as how applicable a generalization is in helping to decode new words.

FREQUENCY

Frequency is defined as a ratio comparing the number of times a rule or generalization is applicable to the total number of times the form of the generalization actually

occurs in a given list or group of words.

ADEQUATE PRESENTATION OF RESEARCH

Presentation of research is considered adequate when at least 50 percent of the generalizations accepted by the text have research documentation.

POOR PRESENTATION OF RESEARCH

Poor presentation of research occurs when less than 50 percent of the generalizations included in the text have research references included.

GOOD PRESENTATION OF RESEARCH

Presentation of research is considered good when between 50 and 90 percent of the generalizations mentioned in the text have research documentation supporting their inclusion.

SUPERIOR PRESENTATION OF RESEARCH

Superior presentation of research occurs when research documentation supporting 90 percent or more of the generalizations included in the text is cited.

CHAPTER II

REVIEW OF RELATED LITERATURE

Beginning reading instruction helps children to recognize that the printed letter combinations they look at are representations of words which are already known and used in their oral language (Heilman, 1976). Children receive help in mastering a number of insights into cracking the code of printed words (Bloomfield, 1942) during this important introductory period. Phonics becomes an aid to decoding and attempts to teach letter-sound relationships. When children apply phonics in reading they translate graphic representations into known speech sounds (Heilman, 1972).

Our English language has many irregularities in its sound-symbol correspondence (Dewey, 1923; Heuser, 1978). These irregularities are what cause decoding difficulties for many beginning readers. It is no wonder then, that phonic generalizations were developed and put into practice as aids in beginning reading instruction.

The value of teaching phonic generalizations has been questioned repeatedly, but until the publication of research concerning phonic rules became available, teachers found it difficult to determine which rules were consistent enough times to be considered useful for decoding unknown words.

Oaks (1952) analyzed the vowel situations found in a number of basal readers. Her study included the use of 1,996

words identified by E.A. Betts as those contained in materials presented from primer through third grade. She examined the vowel and vowel combinations which appeared within Betts' vocabulary words and concluded that of all the vowel phonic generalizations presented as helps to beginning readers, only eight applied often enough to consider teaching. The eight rules were applicable in only about 50 percent of the cases these rules were designed to cover.

Fry (1964) formulated a set of twenty one phonic rules derived from his work in reading clinics. These rules were divided into two categories; major rules had a high degree of frequency and minor rules exhibited a lesser degree of frequency. Fry used his own 300 sight word list, which was called "instant words", as a frequency count of words and applied his list of phonic generalizations to these words. He compared his findings to earlier studies done by Cordts in 1925, Kottmeyer in 1951 and by Sister Mary Carlo Black in 1961 and used a pronunciation system developed by Moore which was based on the work of Bloomfield. The unique features of his study showed a high importance of the schwa sound, a small number of combinations for the long vowel digraphs, the importance of vowel + r words and the representation of the y found at the end of a word as having the vowel sound of the long e. Fry also felt that since his rules had few exceptions they should be the only ones taught to beginning readers.

The important research study by Clymer (1963) followed

by those of Bailey (1967) and Emans (1967), both of whom based their research on the 1963 study by Clymer, helped make it easier for teachers to see the consistency or non-consistency of specific phonic generalizations. The three researchers settled on a list of forty-five generalizations and used different samples of words for different grade levels. Clymer (1963) used four basal texts plus words from the Gates Reading Vocabulary for Primary Grades and identifies a vocabulary list of 2,600 words. Bailey (1967) used the vocabulary lists from eight basal texts found in grades one through six and excluded words that did not appear in at least two of the texts being studied as well as words which stood for the names of persons, places and foreign words. Emans (1967) studied the words which were found beyond the fourth grade and used 1,944 words found in Thorndike's The Teachers' Word Book Of 30,000 Words. Clymer (1963), Bailey (1967) and Emans (1967) accepted two criteria concerning the studies. The first criterion established that the word list would contain a minimum of twenty words to which the generalizations might apply and the second criterion decided upon a utility of at least 75 percent.

Clymer (1963) discovered that many of the phonic generalizations taught were of limited value since only eighteen of the forty-five generalizations had a 75 percent or better utility rate. Many of the most familiar rules fell into this category and this discovery led Clymer (1963) to suggest that the perhaps the 75 percent

utility, used within the study, may have been too high. Clymer specifically noted the 45 percent utility rate of the phonic generalization which is often referred to as, "When two vowels go walking, the first one does the talking." Bailey (1967) found that five of the accepted Clymer (1963) generalizations were not useful beyond the primary grades, and accepted three generalizations which were rejected by the 1963 Clymer study. Bailey recommended that further research include primary grade content materials as well as vocabulary. She noted that regional pronunciations were not taken into consideration in her study.

Emans (1967) accepted sixteen generalizations, noted that four generalizations which proved useful on the primary level were not useful above that level and accepted three generalizations which had been rejected on the primary level. He also recommended that a lower utility rate should be considered. Emans suggested that further studies be done to determine which generalizations should be taught in conjunction with others and which ones should be tried first.

In another study, Emans (1967a) attempted to clarify and increase the utility rate of phonic generalizations by modifying, rewording or combining some of them. The purpose of the study was to discourage the discarding of low utility phonic generalizations and to encourage the alteration of those generalizations to increase their utility. He recommended modifications for eighteen of the phonic

generalizations found in the Clymer (1963) study and suggested additional modifications be made wherever necessary. Emans urged educators to establish methods of finding the best ways of helping children learn to read. He concluded that the discarding of phonic generalizations having low utility was not always necessary and maintained that change or modification of existing rules could improve their utility.

Burmeister (1968) questioned the value or worth of teaching many of the phonic generalizations which appeared in teaching materials in the field of reading. She investigated phonic generalizations found in studies conducted by Oaks (1952), Clymer (1963), Fry (1964), Bailey (1967), Emans (1967) and Winkley (1966). The phonic generalizations were divided into two groups consisting of those rules which had limited utility and those which had reasonably broad application. The study recommended that phonic rules could be improved if educators were to distinguish between single and double vowels. She noted that variations in the source from which sample words were selected usually made little difference in the findings if the sample was large. Another observation determined that the level of difficulty of words made little difference in the utility of a generalization.

Burrows and Lourie (1963) researched the reliability of the phonic rule which is concerned with words containing two adjacent vowels. One thousand three hundred ninety-nine words which were located in the Rinsland Word List were

found to contain two adjacent vowels. These were analyzed according to the vocabularies found in beginning readers. It was discovered that a number of words refuted the rule rather than obeyed it and the researchers stated that knowing what not to teach was only a small step in the teaching of reading. Burrows and Laurie recommended teachers to teach children to rely on context and consonants to help decode unknown words.

In another study conducted by Burmeister (1966) the validity of the statement, "when two vowels appear together they should be viewed as having one sound" was examined. Five hundred thirty-seven randomly selected words following the two adjacent vowel rule were selected from the 1944 Thorndike and Lorge Teachers' Word Book of 30,000 Words. The statement was found to be true 84.5 percent of the time. One-third of the exceptions to this rule were instances of the vowel pair ai. This discovery and other research dealing with phonic generalizations led Burmeister (1968a) to conduct another study to answer questions concerning the most common sounds heard when vowel pairs were presented in print. The sounds of all vowel-vowel combinations which formed a single sound for 17,310 words were classified. The words were selected from a 1966 study completed by Hanna, Hanna, Hodges and Rudorf. The results of the Burmeister (1968a) study indicated that sounds for vowel pairs fell into the following four groups: the first vowel may dominate; the two vowels may cooperate or blend; a new sound may be

created and the vowel pair may separate.

Henderson (1969) researched the percent of utility of each phonic generalization stated in the teacher's manual of three sets of basal readers as applied to the vocabulary found within each text. Words which followed given rules were identified as well as were words which were exceptions to given generalizations. Henderson reported that vowel rules were less dependable than consonant rules and that 25 percent of the phonic generalizations presented in the manuals had utility rates of below 75 percent. The research noted that some phonic rules were common to all manuals, each series developed generalizations which were highly dependable as aids for decoding primary words, each series had included some rules which were not highly dependable and words to be learned as sight words were included in each series. Henderson urged educators to eliminate all phonic generalizations which were unusable and to simplify existing rules which were complex. Her most important recommendation was to have educators review the entire content of phonic programs which were being used in the primary grades.

Burmeister (1981) reported on the specific phonic rule concerning final vowel-consonant-e situations. She examined 2,715 words from a study conducted by Hanna, Hanna, Hodges and Rudorf in 1966 which ended in the final vowel-consonant-e pattern and found that the rule was more valid for some vowels than it was for others. A new or modified rule was

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suggested and stated that words which ended in a single-vowel-single-consonant-e usually had a long vowel sound represent the vowel. The study also recommended that all exceptions to the modified rule be taught as sight words to children in the primary grades. Children in grades above the primary grades should be taught two groups of common exceptions to the new or modified rule.

Bukovec (1971), in his doctoral dissertation assessed the usefulness of Clymer's (1963) forty-five phonic rules in achieving accurate pronunciation when they were applied to a vocabulary sample drawn from popular trade books used in grades one through three. He accepted a 75 percent utility rate and noted that at least twenty words were found to which the generalization applied. Bukovec recorded that fourteen generalizations demonstrated higher utility percent: rate when applied to the trade book vocabularies, twenty one rules achieved higher utility percentages when applied to the basal text vocabulary used by Clymer (1963) and ten rules had identical utility levels. It was suggested that teachers encourage children to read trade books with the expectation that phonic generalizations would be helpful in gaining accurate pronunciation. Bukovec recommended that twenty-two of the phonic generalizations be incorporated into classroom instruction and that children be encouraged to use these rules as starting points to help with decoding. He warned against using phonic rules as end products. The most

important feature of this study indicated a distinction in types of utility. It warned educators against the tendency to equate utility for achieving accurate pronunciation with utility for achieving word recognition.

Carlin (1973) reported that words found in the 1939 Dolch Basic Sight Word List and the 1971 Johnson Basic Vocabulary for Beginning Readers could be decoded by using only two vowel rules and a six step procedure. The first rule concerned long vowels and the second rule presented by Carlin concerned short vowels. The author maintained that if the six step procedure was followed, an 83 percent success rate in decoding would be achieved. In addition, five special patterns were presented and the researcher recommended that these be taught as helps for decoding. He claimed that if these special patterns were learned by students an average of 92 percent of all the unknown words a child met could be decoded without help from a teacher.

A new formula for determining the usefulness of phonic generalizations was presented by Bukovec in 1973. The formula was used as an instrument for determining word recognition rather than an instrument for determining accurate pronunciation and was recorded in the following manner:

$$[C = (E/2) / I]$$
. "C" represented the conformations or total number of instances in which an accurate pronunciation resulted from the application of the generalization. "E" symbolized the exceptions or total number of instances in

which an inaccurate pronunciation resulted from the application of the generalization. "I" represented the incidences or total number of words to which a generalization was actually applied (C+E). When the formula was applied to the Clymer (1963) generalizations, it was discovered that between forty-two and forty-four of the forty-five phonic generalizations were probably sufficiently useful in achieving word recognition for use in instructional programs. The discovery led Bukovec to conclude that future research was needed in the areas of word recognition and children's ability to arrive at word recognition through the use of phonic generalizations.

Hillerich (1974) analyzed the evidence related to the effectiveness of vowel generalizations from two view points: the nature of the letter-sound relationships derived from a study completed by Dewey, Hanna and Hillerich and the nature of these relationships as derived from teaching vowel rules to children. The study reported that there were vowel rules which held true most of the time but which had too few words to be worth teaching and that there were those rules which applied to many words but were so unreliable that they were not worth teaching. Hillerich suggested that emphasis be placed on the exploration of language and learning to read through reading rather than on learning phonic rules which applied to vowels.

Mazurkiewicz (1974) used 1,575 words found in the

Binnsland Basic Vocabulary for Elementary School Children

and undertook a study to determine if e at the end of a word was silent. He reported that the generalization was valid 98.3 percent of the time. In a follow-up study Mazurkiewicz (1974a) continued to use the same 1,575 words ending in e and offered educators a set of generalizations guiding students in the decoding of words ending in e. The result of his studies was added to the research of Clymer (1963), Emans (1967) and Bailey (1967). One primary diacritic e generalization having the utility of 100 percent and eleven secondary generalizations having the utility of between 87 and 100 percent were presented. A subsequent study reported by Mazurkiewicz (1974b) determined the applicability of the diacritic e generalizations to the vocabularies developed by Harris-Jacobson, Dolch, Sherk and Murphy. It was concluded that the generalizations governing the diacritic e were highly applicable to a reading, speaking and sight vocabulary.

Mason and Surber in 1977 conducted a study which found that phonics instruction improved when children were given consistent examples when taught a vowel cluster sound pattern. The researchers recorded the ability of young children to learn a rule concerning the a sounds and to transfer this knowledge to new words. Twenty children aged four years old were the subjects of this study. The children were divided into two groups of ten students each. One group of four boys and six girls received whole word

instruction, while the other group of five boys and five girls received letter instruction. A presentation of two stories, one with target words containing long a vowel patterns and one with target words having inconsistent a vowels was made. Each group was pretested on the knowledge of the target words, drilled on the rule and the target words representing the rule. There were four training sessions followed by a post test one week after completion of the fourth session. A 2x2 multivariate analysis of covariance tested the effect of word list learning transfer and transfer of the rule for the entire word and transfer of the rule for the correct preceding or succeeding consonant. A test of the difference between the pretest and the post test was done and resulted in the post test being significantly greater than the pretest. Mason and Surber discovered that after the training sessions children were able to identify the vowel sound pattern even if they couldn't read the transfer word. It was noted that the number of rules necessary to decode most common vowel patterns was large and questioned whether the teaching of more than one rule at a time would tend to confuse students. The researchers acknowledged that there were many common words in beginning readers which must be learned without the aid of rule. They also pointed out that the question of how to teach the many other rules still remained.

Leslak (1977) also studied the need for generalizations. Her study determined that children were able to benefit from

rules found most applicable. Four junior and senior high school students were the subjects of this study and had reading scores three or four levels below grade expectancy. The students all lacked systematic word attack skills. Forty phonic rules developed by Huelmsman were selected. These included rules researched by Clymer (1963), Bailey (1967) and Emens (1967). Two thousand nine hundred twenty five words from the Thorndike-Lorge Word List of 30,000 Words served as a word corpus. Lesisk determined that at least thirty words were necessary for each rule and that the utility rate had to be at least 75 percent. If a rule met both criteria it was considered useful. Rules which did not meet the criteria were modified. Eighteen of the rules were accepted, ten rules were modified, eight rules were combined to make four rules and four rules were shown to have little or no value. The study concluded that certain rules were helpful to students in need of help in decoding words. Lesisk recommended that teachers teach students to be flexible with regard to phonic generalizations and that teachers modify some of the existing phonic rules used in decoding unknown words.

Vowel sounds were the subject of a study completed by Mason (1977) which found that 40 percent of the 200 words found on the Dolch List were not pronounceable by using the most frequently occurring vowel sounds. She categorized the sample words into major pattern words, or those words with

vowels which were pronounced with the sound most frequently occurring for that vowel and minor vowel pattern words, or those words which contained vowels which were pronounced with less frequency. Exceptions were considered as words having unique vowel sound patterns. It was recommended that teachers begin teaching major vowel pattern words early, that teachers teach minor patterns as generalizable patterns which may have a vowel or vowel cluster with several sounds and that the exceptions be presented to students as sight words.

Hillerich (1978) presented an exploration technique which was to help students avoid tendencies to rely totally on phonic generalizations to decode words. The study suggested that teachers identify a given vowel and request students to examine printed language to find words which contain the same sound as the given vowel regardless of the spelling. He offered another teaching method which urged teachers to state a specific rule and require students to make lists of words adhering to the rule.

Caldwell, Roth and Turner (1978) studied twenty three of the phonic generalizations governing vowel and consonant decoding supplied by Clymer (1965), Bailey (1967) and Emans (1967) studies. Eighteen thousand words from the Kucera and Francis Word List were analyzed by a computer program to determine if the use of words in running text and the frequency in numbers of words caused results different from

the previous studies. The generalizations were also classified as simple and complex. The researchers reported that there was fairly high agreement among most of the four studies used for the purpose of their research concerning utility rates. The recommendation that a higher order unit approach be used in teaching some of the more complex rules was made. It was determined that seven consonant rules and one vowel rule were consistent and complex, one consonant rule and four vowel rules were simple but inconsistent, one consonant rule and one vowel rule were inconsistent and complex and one vowel rule was considered too vague to be useful.

Once phonic generalizations were researched and developed, a number of studies were undertaken to determine if teachers were familiar with these generalizations. Questions were asked of teachers and professors to discover if phonic rules were known and could be applied. The results of some of this research is reviewed within this paper.

Ramsey (1962) observed that teacher manuals included phonic lessons and felt that many teachers did not have adequate knowledge of phonics to teach it well. He undertook a study which included 236 prospective elementary school teachers enrolled in five midwest colleges. These students were given a questionnaire and a pretest at the beginning of their first reading methods course. The results showed that students knew consonant sounds and showed weaknesses in

in determining the pronunciation of vowel sounds and some students were unable to verbalize important rules concerning word recognition.

Fleming (1972) attempted to find out if a systematic relationship could be established between the reported utility of phonics generalizations and teachers' understanding of these generalizations. The researcher used the phonic generalizations studied in the Clymer (1963), Bailey (1967) and Emans (1967) reports which were replicated in the 1969 edition of Spache and Spache's basic reading text. Forty teachers, having between one and three years of experience, were asked to produce a word illustrating each of the thirty seven phonic generalizations which were given orally. Each rule was read twice and the teachers were allowed fifteen seconds to respond. Only the omissions were considered and omissions were viewed as if there was no knowledge of the rule. The results of the study indicated that more omissions occurred with rules having a reported fewer than 50 percent utility and that there was more value in being able to apply a rule than there was in just being able to utter the generalization covering it. It was also concluded that one could not assume that even experienced teachers possessed a hierarchy of knowledge of phonic generalizations which could automatically be transferred to the teaching of reading.

A report by Anderson (1973) showed that pupils taught

by proficient teachers of phonics obtained higher scores than those children instructed by non-proficient teachers of phonics. The study also indicated that teacher knowledge of phonic rules was significantly related to pupil achievement in phonic understandings. Her study included select groups of fourth grade students instructed by proficient teachers of phonics and by non-proficient teachers of phonics. The purpose of the study was to determine the differences in pupil achievement when students were divided into groups based on the number of years of experience and the number of college or graduate reading methods courses of the participating teachers. Anderson also reported that the number of reading courses was positively related to the teacher's ability to acquire phonic knowledge.

Eberwein and Franke (1974) presented a report which detailed their study in which elementary preservice and classroom teachers were given a nonsense word test as well as a test of phonic generalizations to determine if teachers were able to use phonic rules when pronouncing unknown nonsense words. They also attempted to establish a relationship between the ability to pronounce nonsense words and knowledge of phonic rules. The results showed that the total teacher population pronounced over one-half of the nonsense words correctly. The preservice teachers did better than the classroom teachers. The relationship between ability to pronounce unknown nonsense words and knowledge

of phonic generalizations was low but significant for the total teacher population. It was significant and high for the preservice population.

Mazurkiewicz (1975) reported that teachers had adequate knowledge of terms used in reading, but a low level of ability to apply them to words typically found in reading materials. His study included 252 kindergarten through sixth grade teachers from fifty-seven schools in twenty-six school districts surrounding Kean College, Union, New Jersey. The subjects had a varied number of years of experience. Mazurkiewicz observed weakness in knowledge of consonant and vowel letters, phonic generalizations and sound symbol correspondences. He recommended specific instruction in phonics be given to teachers.

Next, Mazurkiewicz (1975a) studied the types of phonics materials which were presented to students by college professors. He examined a number of instructional materials for in-service and the text books for pre-service instruction and concluded that little had been done to correct rules which had been contraindicated by research. A questionnaire was developed and included knowledge of phonic related terms, use of terms, professor's expectations of students regarding the use of terms and other items. A total of 222 college professors from all parts of the United States participated in this study. The data indicated that a large percentage of the sample studied persisted in teaching or requiring

teachers to know poor if not incorrect generalizations, rejected research on phonic generalizations, were reluctant to change and there were some indications that some college professors were unaware of research in the area of phonic generalizations. Mazurkiewicz concluded that college professors who taught reading courses did not agree on the rules to be taught as aids in decoding. It was further concluded that teachers of reading were poorly prepared and therefore taught children with far less than a good understanding of the principles involved in phonic and word analysis.

Fusaro (1977) determined the extent to which teachers or prospective teachers were able to discriminate among phonic generalizations of varying degrees of utility. He selected forty-two graduate students enrolled in a reading course as the subjects for his study. The students all had limited teaching experience. They were asked to rate fifteen phonic generalizations according to the degree of utility the students thought the rule possessed. Each of five rules had a utility level of 75 percent or better, five rules had a utility rate of between 50 and 74 percent and five rules possessed a utility rate of less than 50 percent according to the 1963 Clymer study. The data was analyzed by a one-way analysis of variance with repeated measures. The overall F Test was significant. Fusaro concluded that the subjects were able to discriminate among generalizations

of varying degrees of utility. They were fairly consistent in correctly perceiving high utility generalizations as having high utility. The subjects were less certain of the moderate and low level utility rules than they were of the high utility rules.

Gilstad (1979) criticized the Fusaro (1977) report concerning the ability of teachers to discriminate among phonic generalizations of varying degrees of utility. She stated that the study was narrow because it only concerned itself with fifteen phonic rules and the materials from which the phonic generalizations were developed was a controlled vocabulary. Gilstad questioned the conclusions offered by Fusaro (1977) and pointed out that Fusaro (1977) misinterpreted materials presented by Fleming (1972). She also indicated that teacher knowledge of the utility of the phonic generalizations contained in the study was what was discussed in Fusaro's study in 1977. Gilstad indicated that, until recently, few college level courses included phonic generalizations. She suggested that perhaps the 1977 Fusaro study actually questioned whether teachers knew statistically which phonic rules could always be used and which ones could not. Gilstad felt that it was unreasonable to state the question in this manner since the statistical information of various phonic generalizations was commonly omitted from most reading methods courses on the college level. She concluded that Fusaro's (1977) study was not

of varying degrees of utility. They were fairly consistent in correctly perceiving high utility generalizations as having high utility. The subjects were less certain of the moderate and low level utility rules than they were of the high utility rules.

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based on a realistic expectation that certain knowledge concerning the statistical information about phonic rules or generalizations was present among the subjects of the study. She also claimed that the procedure used within the study was not logically consistent.

In reviewing the literature relating to phonic generalizations it was discovered that some authorities felt that the teaching of certain high utility generalizations could be helpful to students decoding unknown words. Authorities also cautioned educators that some rules were not consistent enough times to be used as a means of decoding. Educators were often urged to develop new rules which would be simple as well as helpful in decoding. New or modified generalizations were presented in studies which attempted to present concise, simple and clear phonic generalizations of high utility. Methods other than generalizations were also introduced as means of word recognition.

The studies which determined teacher knowledge of phonic generalizations showed this to be an area which needed further development. Recommendations were made to include courses on phonic generalizations in preservice and inservice situations. Authorities also indicated that teachers were not being presented with the most current research on phonic generalizations with high utility rates. It was also agreed by most authorities that basal reading manuals as well as college level and graduate level courses were not presenting

phonic rules with the highest utility rates as indicated by research.

CHAPTER III

DESIGN OF THE STUDY

PROCEDURES USED

Several teacher's manuals which accompany basal readers, grades 1 through 4, were randomly selected and examined to determine if phonic generalizations were presented as methods of word attack. Frequency rates, utility data and research were searched for to support the use of specific phonic generalizations included in the texts. All manuals included in this study were either available for use in or in use in schools located in Staten Island, New York at the time of this study.

The selection of seven texts on the college level in elementary reading methods courses was made. All colleges and universities were located in the New York City metropolitan area. Representation of both private and public schools of higher education was sought.

Phonic generalizations studies by Clymer (1963), Bailey (1967) and Emans (1967) were examined and used to compare with each of the selected texts. The acceptance of a seventy-five percent utility rate was made.

SOURCES AND METHODS OF GATHERING THE DATA

The selection and examination of the teacher's manuals was made from the basal series which were used during the

Fall 1979-Spring 1980 school year in three New York City schools, one public, one private and one parochial. The three types of schools were selected to obtain a well-rounded sample of the different types of reading materials available for teacher and pupil use in different educational settings.

Undergraduate texts were located at the following colleges and universities and included:

Barnard College
New York, New York

Dallmann, Martha, ET AL.
The Teaching of Reading.
New York: Holt Rinehart
and Winston, 1978. 550pp.

Hunter College
New York, New York

Harris, Larry A. and
Carl B. Smith. Reading
Instruction: Diagnostic
Teaching In The Classroom.
New York: Holt, Rinehart
and Winston, .976. 498 pp.

Jersey City State College
Jersey City, New Jersey

Spache, George and Evelyn
B. Spache. Reading In The
Elementary School. Boston:
Allyn and Bacon, Inc.,
1977. 482 pp.

St. John's University
College of Notre Dame
Campus
Staten Island, New York

Karlin, Robert. Teaching
Elementary Reading:
Principles and Strategies.
New York: Harcourt Brace
Jovanovich, Inc., 1975.
416 pp.

Seton Hall University
South Orange, New Jersey

Smith James A. Creative
Teaching Of Reading In The
Elementary School. Boston:
Allyn and Bacon, Inc., 1975.
342 pp.

The College of Staten
Island
Staten Island, New York

Lapp, Diane and James Flood.
Teaching Reading To Every
Child. New York:
Macmillan Publishing Co.,
Inc., 1978. 778 pp.

Wagner College
Staten Island, New York

Ransom, Grayce. Preparing
To Teach Reading. Boston:
Little, Brown and Company,
1978. 556 pp.

The exact titles, authors, editions and copyright dates for each text were obtained from the instructors of each course. Questions were constructed to determine the following points: Were any phonic generalizations presented in each text which were also identified in the Clymer (1963), Bailey (1967) and Emans (1967) studies? Did the texts present any phonic generalizations which were not mentioned in the studies of Clymer (1963), Bailey (1967) and Emans (1967)? What research, if any, was presented to enable future teachers to determine if the particular rule qualified as a useful decoding tool?

Each text was then categorized into one of four groups; superior, good, adequate and poor for each of the following areas: presentation of research to substantiate the inclusion of phonic generalizations, presentation of phonic rules or generalizations which met the 75 percent utility rate and presentation of cautions in the use of phonic rules. An overall assessment of how well or poorly these seven college level texts presented decoding through the use of phonic generalizations was included in the conclusion of the study. Data were tabulated in table form.

There were no norms against which the construction of questions used in this study might be checked or measured, nor were there any reliability criteria to compare with

this study. The formulated questions had content validity.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Phonic generalizations are often presented as decoding tools in beginning reading programs. To determine if the phonic generalizations presented as aids have value, it was essential to examine the teacher's manuals (Appendix A), grades 1 through 4, which accompany a number of basal reading series used in schools in Staten Island, New York. The manuals were examined for the citation of research studies and the presentation of utility and frequency data concerning the phonic generalizations offered as decoding aids. The results of the examination indicated that although teacher's manuals included many phonic rules, none of the examined texts gave any utility or frequency data or cited any research studies to support the inclusion of the selected phonic rules. This discovery led to the decision to investigate seven undergraduate level texts used to teach reading methods courses in colleges and universities in the New York City Metropolitan area.

The Clymer (1963), Bailey (1967) and Emans (1967) research studies concerning phonic generalizations are replicated in Table I, omitting any generalizations concerning syllabication. The seven college texts were then examined to see if these landmark studies were replicated or mentioned. It was observed that only the Lapp and Flood and the Spache and Spache text actually attempted to reproduce the studies. Each did so with unexplained omissions and changes. Lapp and Flood omitted part of rule two found in Table I as well as utility percents for the omitted sections. They also eliminated both Clymer's (1963) and Emans' (1967) utility percents for rule six, Table I. A typographical error was noted in rule twenty-five which is listed as rule twenty-one on page 219 of the Lapp and Flood text. The rule as stated in the text reads, "Ch is usually pronounced as in kitchen, catch, and chair, not like ah." The correct ending for this rule, as shown in the research studies, should read sh, not ah. Lapp and Flood incorrectly presented the utility rate for rule thirty-three which is listed in their text on page 220 as rule twenty-eight as being 100 percent for all three studies. The Clymer (1963) study records a 99 percent utility, the Bailey (1967) study shows a 98 percent utility and the Emans (1967) study, a 91 percent utility.

TABLE I
UTILITY OF VOWEL AND CONSONANT PHONIC
GENERALIZATIONS
RESEARCHED BY CLYMER, BAILEY AND EMANS

GENERALIZATION	UTILITY PERCENTS			TEXTS						
	Clymer 1963	Bailey 1967	Emans 1967	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. When there are two vowels side by side, the long sound of the first is heard and the second is usually silent.	45	34	18	*	*					
2. When a vowel is in the middle of a one syllable word, the vowel is short	62	71	73	*	*					
is the middle letter	96	78	81							
is one of the middle two letters in a word of four letters	59	68	71							
is one vowel within a word of more than four letters.	46	62	42							
3. If the only vowel letter is at the end of a word, the letter usually stands for a long sound.	74	76	33	*	*					
4. When there are two vowels, one of which is final e,, the first vowel is long and the <u>e</u> is silent.	63	57	63	*	*					

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TABLE I (continued)

GENERALIZATION	UTILITY PERCENTS			TEXTS					
	Clymer 1963	Bailey 1967	Emans 1967	Lapp & Flood	Spache & Spache	Karlin Harris & Smith	Smith	Dallmann ET AL	Ransom
5. The <u>r</u> gives the preceding vowel a sound that is neither long or short.	78	86	82	*	*				
6. The first vowel is usually long and the second silent in the digraphs <u>ai</u> , <u>ea</u> , <u>oa</u> , and <u>ui</u> .	66	60	58		*				
<u>ai</u>	64	72	83						
<u>ea</u>	66	55	62		*				
<u>oa</u>	97	95	86		*				
<u>ui</u>	6	10	0						
7. In the phonogram <u>ie</u> , the <u>i</u> is silent and the <u>e</u> has the long sound.	17	31	23	*	*				
8. Words having double <u>e</u> , usually have the long <u>e</u> sound.	98	88	100	*	*				
9. When words end with silent <u>e</u> , the preceding <u>a</u> or <u>i</u> is long.	60	50	48	*	*				
10. In <u>ay</u> , the <u>y</u> is silent and gives <u>a</u> its long sound.	78	88	100	*	*				
									35

TABLE I (continued)

GENERALIZATION	UTILITY PERCENTS				TEXTS				Ransom
	Clymer 1963	Bailey 1967	Emans 1967	Lapp & Flood	Spache & Spache	Karlin Harris & Smith	Smith	Dallmann ET AL	
11. When the letter <u>i</u> is followed by the letter <u>gh</u> , the <u>i</u> usually stands for its long sound and the <u>gh</u> is silent.	71	71	100	*	*				
12. When <u>a</u> follows <u>w</u> , it usually has the sound <u>a</u> has in <u>was</u> .	32	22	28	*	*				
13. When <u>e</u> is followed by <u>w</u> , the vowel sound is the same as represented by <u>oo</u> .	35	40	14	*	*				
14. The two letters <u>ow</u> make the long <u>o</u> sound.	59	55	50	*	*				
15. <u>w</u> is sometimes a vowel and follows the vowel digraph rule.	40	33	31	*	*				
16. When <u>y</u> is the final letter in a word, it usually has a vowel sound.	84	89	98	*	*				

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TABLE I (continued)

GENERALIZATION	UTILITY PERCENTS			TEXTS						
	Clymer 1963	Bailey 1967	Emans 1967	Lapp & Flood	Spache & Spache	Karlin Harris & Smith	Smith	Dallmann ET AL	Ransom	
17. When <u>y</u> is used as a vowel in words, it sometimes has the sound of long <u>i</u> .	15	11	4	*	*					
18. The letter <u>a</u> has the same sound (o) when followed by <u>i</u> , <u>w</u> and <u>u</u> .	48	34	24	*	* ^a					
19. When <u>a</u> is followed by <u>r</u> and final <u>e</u> , we expect to hear the sound heard in <u>care</u> .	90	96	100	*	*					
20. One vowel letter in an accented syllable has its short sound.	61	65	64	*	*					
21. When <u>y</u> or <u>ey</u> is seen in the last syllable that is not accented, the long sound of <u>e</u> is heard.	0	0	1	*	*					
22. In many two and three syllable words, the final <u>e</u> lengthens the vowel in the last syllable.	46	46	42	*	*					

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TABLE I (continued)

GENERALIZATION	UTILITY PERCENTS				TEXTS				
	Clymer 1963	Bailey 1967	Emans 1967	Lapp & Flood	Spache & Spache	Karlin Harris & Smith	Smith	Dallmann ET AL	Ransom
23. When a word has only one vowel letter, the vowel sound is likely to be short.	57	69	70						
24. When there is one <u>e</u> in a word that ends in a consonant, the <u>e</u> usually has a short sound.	76	92	83	*	*				
25. When <u>c</u> and <u>h</u> are next to each other, they make only one sound.	100	100	100	*	*				
26. <u>Ch</u> is usually pronounced as it is in <u>kitchen</u> , <u>catch</u> and <u>chair</u> , not like <u>sh</u> .	95	87	67	* ^a	*				
27. When <u>c</u> is followed by <u>e</u> or <u>i</u> , the sound of <u>s</u> is likely to be heard.	96	92	90	*	*				
28. When the letter <u>c</u> is followed by <u>o</u> or <u>a</u> , the sound of <u>k</u> is likely to be heard.	100	100	100	*	*				

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TABLE I (continued)

GENERALIZATION	UTILITY PERCENTS			TEXTS						
	Clymer 1963	Bailey 1967	Emans 1967	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
29. The letter <u>g</u> often has the sound similar to that of <u>j</u> in <u>jump</u> when it precedes the letter <u>i</u> or <u>e</u> .	64	78	80	*	*					
30. When <u>ght</u> is seen in a word, <u>gh</u> is silent.	100	100	100	*	*					
31. When a word begins with <u>kn</u> , the <u>k</u> is silent.	100	100	100	*	*					
32. When a word begins with <u>wr</u> , the <u>w</u> is silent.	100	100	100	*	*					
33. When two of the same consonants are side by side, only one is heard.	99	98	91	^a *	*					
34. When a word ends in <u>ck</u> , it has the same last sound as in <u>look</u> .	100	100	100	*	*					
a. error discovered in replication										

Spache and Spache omitted all of rule twenty-three and part of rules two and six found in Table I. There was no explanation for the omissions. Rule eighteen, listed as rule nine on page 375 of the Spache and Spache text, was printed as, "The letter a has the same sound as (o) when followed by l, w, and u." The correct replication should have read (ô), not (o).

Spache and Spache stated that there is no data available which shows how often the phonic generalization stated as, "The final e in most words is silent," is true. Mazurkiewicz (1974) researched this statement and established the silent or final e to be true, or a valid conclusion 98.3 percent of the time. The Spache and Spache statement appeared in the 1977 edition of their text while the Mazurkiewicz study was published in 1974, indicating that Spache and Spache were either unaware of the Mazurkiewicz (1974) study, failed to update the information in their text concerning the final e research studies, or disagreed with the finding of the study and therefore failed to report it.

Lapp and Flood stated that phonic rules with high utility rates were helpful when teaching children to decode. They suggested teaching the Magic E rule which is stated as, "Es at the end of a nonosyllabic word usually make the first vowel a long sound."

The Harris and Smith text chose to replicate another study done by Emans (1967^a) which attempted to modify the original Clymer (1963), Bailey (1967) and Emans (1967) studies. Table II lists the modified rules established by Emans (1967^a) and shows the omission of a number of high utility rules by the Harris and Smith text. Also omitted were generalizations with a utility rate of 77 percent or lower. None of the omissions were explained. The double e rule found in Table II was omitted from the Harris and Smith list found on page 187 of their text. An incorrect replication of a utility percent was noted for rule seventeen in Table II. Harris and Smith stated the utility as 97 percent, the actual study by Emans (1967^a) gives a 92 percent utility.

TABLE II

MODIFICATIONS OF THE ORIGINAL CLYMER, BAILEY AND EMANS
 PHONIC GENERALIZATIONS PROPOSED
 BY EMANS

GENERALIZATION	UTILITY		TEXTS					
	Emans 1967a	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. The letters <u>io</u> usually represent the short <u>u</u> sound.	86%				*			
2. The letters <u>oo</u> usually have the long double <u>o</u> sound as in <u>food</u> , or the short double <u>o</u> sound as in <u>good</u> . They are more likely to have the sound of <u>food</u> .	100%				*			
3. When a vowel is in the middle of a one syllable word, the vowel is short except that it may be modified in words which the vowel is followed by an <u>r</u> .	80%				* a			
4. When the first vowel in a word is <u>o</u> and the second is <u>a</u> , the <u>o</u> is usually long and the <u>a</u> is silent.	86%				*			

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TABLE II (continued)

GENERALIZATION	UTILITY		Spache & Spache	TEXTS				
	Emans 1967a	Lapp & Flood		Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
5. When the first vowel in a word is a and the second is <u>i</u> , the <u>a</u> is usually long and the <u>i</u> is silent.	83%				*			
6. Words having double <u>e</u> usually have the long <u>e</u> sound.	100%							
7. The vowel combination <u>ui</u> has a short <u>i</u> sound.	79%				*			
8. When words end with silent <u>e</u> , the preceding <u>a</u> or <u>i</u> is long when the endings <u>le</u> and <u>we</u> are excluded.	71%							
9. The two letters <u>ow</u> make the long <u>o</u> sound or the <u>ou</u> sound as in out.	100%				*			
10. When <u>y</u> is the final letter in a word, other than those with <u>ay</u> , it has a vowel sound.	100%							
11. When <u>y</u> is used as a vowel it most often has the sound of long <u>e</u> .	92%				*			43

TABLE II (continued)

GENERALIZATION	UTILITY			TEXTS				
	Emans 1967a	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
12. The letter <u>a</u> has the same sound as (ɔ) when followed by <u>w</u> and <u>u</u> .	84%				*			
13. When <u>e</u> is followed by <u>e</u> or <u>i</u> the sound of <u>s</u> or <u>sh</u> is likely to be heard.	100%							
14. When two of the same consonants are side by side, only one is heard except when a prefix or suffix is added to the root word.	99%							
15. One vowel letter in an accented syllable has its short sound if it comes before the end of the syllable and its long sound if it comes at the end of the syllable. Except when it is followed by an <u>r</u> .	78% 92%				* *a			
16. When <u>y</u> or <u>ey</u> is seen in the last syllable that is not accented, the short <u>i</u> is heard.	87%				* a			
17. In many two and three syllable words the final <u>e</u> lengthens the vowel in the last syllable with the exceptions <u>le</u> or <u>we</u> .	64%							

TABLE II (continued)

GENERALIZATION	UTILITY		TEXTS					
	Emans 1967a	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
18. When a word has only one vowel letter the vowel sound is likely to be short unless the vowel letter is followed by an <u>r</u> .	78%				*			
19. Except in some words with a prefix and a root word, if the first vowel sound in a word is followed by a single consonant, that consonant begins the second syllable and the vowel sound in the first syllable will be long, or if the consonant ends the first syllable the vowel sound will be short.	84%				*			

a. information incorrectly replicated within the text

An error was noted concerning rule thirteen, found on page 187 of the Harris and Smith text. The authors stated the rule as, "When y of ey is seen in the last syllable that is not accented, the short i is heard." This unfortunate typographical error changes the entire meaning of the generalization. The authors also incorrectly stated the utility of this generalization as being 97 percent when the study presents an 87 percent utility rate. Harris and Smith included in the list of modified rules a rule which was not modified and not included in the Emans (1967^a) study. It is number four found in the text on page 187, and reads, "When the vowel is the middle letter of a one syllable word, the vowel is short." The modified version of this rule, in the study by Emans (1967^a), actually reads, "When a vowel is in the middle of a one syllable word, the vowel is short except that it may be modified in words which the vowel is followed by an r." The text incorrectly replicates the utility as 80 percent when it actually is 62 percent on the primary level and 73 percent above the primary level. The 80 percent rate given by Harris and Smith represents the modified version of the rule.

Six of the seven texts presented a number of phonic rules or generalizations to be used as decoding aids, but none of the six texts presented utility or frequency data to substantiate their use. Many of the phonic generalizations found in Table III are similar with only one word or phrase causing an alteration in the meaning of the rule or generalization. Each generalization suggested by the authors of the six text books is listed in Table III.

Lapp and Flood presented future teachers with statements concerning rules governing vowels and consonants. Most of the rules were not listed in numbered sentences, but had to be extracted from the text surrounding them. The authors did list separately four numbered rules for short vowels and three numbered rules for long vowels.

Spache and Spache explained that they reviewed the phonic generalizations presented in the Clymer (1963), Bailey (1967), Emans (1967) and Burmeister (1968) studies and reduced them to a minimum by eliminating the weaker rules. They stated that they adapted and simplified the form of the phonic generalizations offered in the four studies. An apology was extended to the readers because Spache and Spache felt that they were unable to further simplify some of the phonic rules which they offered as decoding aids or tools.

TABLE III
SUGGESTED PHONIC RULES VALUABLE
AS DECODING AIDS

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. When the letter combinations <u>nd</u> follows the single <u>i</u> in a syllable, the vowel sound is long. <u>o</u>	*		*	*			
2. When the letter combination <u>re</u> follows a single vowel in a syllable, one generally hears an <u>r</u> sound.	*		*				
3. When a vowel is followed by an <u>r</u> it has a modified sound that is neither long or short.				*		*	*
4. E at the end of a monosyllabic word usually makes the first vowel have a long sound. This is sometimes called the Magic <u>E</u> Rule.	*		*				
5. If a final <u>e</u> in a word is preceded by a single consonant, a single vowel preceding the consonant is usually long and the <u>e</u> is silent.						*	

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
6. A vowel grapheme represents a short vowel when it is followed by a consonant unit (<u>fat</u> , <u>crab</u>).	*						
7. A single vowel usually represents the short sound if it is in a closed syllable ending in a consonant.						*	
8. When a vowel in a one syllable word is followed by a consonant its sound is short.			*				
9. A vowel grapheme represents a short vowel when it is followed by a compound consonant unit (<u>badge</u> , <u>existence</u>).	*						
10. A vowel grapheme represents a short vowel when it is followed by a double consonant (<u>little</u>).	*						
11. A vowel grapheme represents a short vowel when it is followed by a cluster of consonants (<u>little</u> , <u>fast</u>).	*						
12. The vowels <u>a</u> , <u>e</u> , <u>i</u> , <u>o</u> , and <u>u</u> in an unaccented syllable all have a <u>soft</u> , short sound that is the same and is called the schwa sound.	*						

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Random
13. The schwa may appear as any vowel letter if the vowel is found in an unaccented syllable. It may appear as the short <u>u</u> and the vowel sound in <u>ir</u> , <u>er</u> and <u>ur</u> .	*						
	*						
	*						
	*						
14. When <u>y</u> is the final letter in a word, it usually has a vowel sound.							*
15. The letter <u>y</u> represents the short <u>i</u> when it appears within a syllable not containing a vowel letter.	*						
16. The letter <u>y</u> generally represents the long <u>i</u> sound when it appears as the final sound in a one syllable word (<u>by</u> , <u>cry</u> , <u>my</u>).	*	*					
17. In longer words, <u>y</u> has the long sound of <u>e</u> as in <u>baby</u> .		*					
18. A final <u>y</u> in words of more than one syllable usually represent the short <u>i</u> sound (<u>baby</u> , <u>funny</u>).						*	

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TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
19. The letters <u>w</u> and <u>y</u> function as consonants only when they appear as the initial letter in a syllable.	*						
20. When two or more consonants appear in succession in a word, they function as blends.	*						
21. When two consonants appear together in a word in a combination sound which differs from each individual sound it is referred to as a consonant digraph (<u>gh</u> , <u>ng</u> , <u>sh</u> , <u>ph</u>).	*						
22. The digraph <u>ch</u> has more than one sound	*					*	
<u>ch</u> --chef	*					*	
<u>ch</u> --character	*					*	
<u>ch</u> --chomp	*					*	
23. In English we have three consonants which when they are combined have one sound							
<u>chr</u>	*						
<u>sch</u>	*						
<u>spi</u>	*						
<u>phr</u>	*						
<u>thr</u>	*						

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
24. When <u>c</u> and <u>h</u> are next to each other they make only one sound.		*				*	*
25. <u>Ch</u> is usually pronounced as it is in <u>kitchen</u> , not like <u>sh</u> .		*					*
26. When a word ends in <u>ck</u> it has the same last sound as in <u>look</u> .		*					*
27. When two of the same consonants are side by side, only one is heard (<u>butter</u>).		*					*
28. The first vowel is long and the second is silent in <u>oa</u> <u>ay</u> <u>ai</u> <u>ee</u> <u>ea</u>		*	*				*
		*	*				
		*	*				
		*	*				
		*	*				
29. In <u>ea</u> the first letter may be long and the second may be silent, or it may have the short <u>e</u> sound, as in <u>bread</u> .		*					
		*					

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
30. Words having double <u>e</u> usually have the long <u>e</u> sound.							*
31. <u>Ou</u> has two sounds, the long <u>o</u> and the <u>ou</u> heard in <u>cow</u> and <u>own</u> .		*					
32. A vowel grapheme represents a long vowel sound when it is followed by a consonant which in turn is followed by <u>l</u> or <u>r</u> and another vowel usually final <u>e</u> (<u>cradle</u> , <u>table</u>).	*						
33. The vowel grapheme <u>oi</u> and <u>oy</u> represent the long vowel sound of /y/ in <u>boil</u> and <u>boy</u> .	*						
34. The vowel graphemes <u>ou</u> and <u>ow</u> represent the long vowel sound of /aw/ in <u>about</u> and <u>how</u> .	*						
35. When the vowel grapheme occurs as the last unit of a syllable and when it is preceded by a consonant unit, the grapheme will represent the long vowel sound (tree).	*						53

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
36. A single vowel usually represents the long sound if it is the last letter in an accented or open syllable.						*	
37. The combination <u>ou</u> has the schwa sound as in <u>vigorous</u> or as sound as in <u>out</u> .		*					
		*					
38. The combination <u>oo</u> has two sounds							
<u>oo</u> as in moon		*					
<u>oo</u> as in wood		*					
They are more likely to have the sound of moon.		*					
39. A vowel at the end of a word that contains no other vowels is long.							*
		*					
40. These double vowels blend into a single sound							
<u>au</u>		*					
<u>aw</u>		*					
<u>oi</u> a		*					
<u>oy</u> a		*					

TABLE III (continued)

RULE	TEXTS					
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL
41. Certain double vowels have linked sounds that make use of both vowels. <u>ou</u> <u>ow</u> <u>oi</u> <u>oy</u>				* * * * *		
42. When a is followed by r and final e we expect to hear the sound heard in care. The word <u>are</u> is an exception and should be learned as a sight word.						*
43. The first letter in <u>gn</u> <u>kn</u> <u>wr</u> is silent.			* * *			* * *
44. When <u>ght</u> is seen in a word, the <u>gh</u> is silent.						*
45. The consonant digraph <u>th</u> may represent a voiced (<u>that</u>) or unvoiced (<u>think</u>) sound.						*

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
46. Some consonants represent one sound (ham, cup, bat, dig) and others represent two or more sounds s=/z/ /s/ /sh/ /zh/ x= /ks/ /gz/ /z/.						*	
47. A y that is not preceded by a vowel has the long <u>i</u> sound.			*			*	
48. A vowel followed by the consonants <u>l</u> <u>r</u> <u>w</u> is neither long nor short.			*				*
49. The letter <u>a</u> followed by an <u>l</u> <u>w</u> <u>u</u> <u>ll</u> is neither long nor short.			*			*	
50. When there is only one vowel in a word or syllable, that vowel usually has the short sound if the vowel stands at the beginning or the middle of the word.				*		*	

TABLE III (continued)

RULE	TEXT						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
51. When a two vowel word or syllable has a silent <u>e</u> at the end, the first vowel in the word usually has a long sound.				*			
52. When there is a double vowel in a word or syllable, the first vowel usually has a long sound and the second is silent.				*			
53. The letter <u>y</u> generally represents the long <u>e</u> sound when it appears as the final letter in a multisyllabic word (dairy, fairy, berry).	*						
54. The letter <u>y</u> generally represents the long <u>i</u> sound when it appears as the final letter or a syllable that is not the last syllable of a multisyllabic word (cycle, dynamo).	*						
55. The letter <u>s</u> sometimes has the sound of <u>z</u> (rais <u>i</u> n, mus <u>i</u> c).		*					

57

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
56. When the consonant <u>c</u> is followed by <u>a</u> , <u>o</u> or <u>u</u> , the sound of <u>k</u> is often heard. (hard <u>c</u>).	*		*			*	
57. When <u>c</u> is followed by <u>e</u> , <u>i</u> or <u>y</u> , the sound of <u>s</u> is often heard. (also called soft or voiceless)	*	*	*			*	*
Otherwise <u>c</u> has the sound of <u>k</u> as in <u>come</u> or <u>attic</u> . (hard <u>c</u>)		*					*
58. When the consonant <u>g</u> is followed by <u>e</u> , <u>i</u> or <u>y</u> , the sound of <u>j</u> is heard. (soft <u>g</u>)	*	*	*			*	*
Otherwise the hard sound is heard.							
59. When the consonant <u>g</u> is followed by <u>a</u> , <u>o</u> , or <u>u</u> the hard sound of <u>g</u> is heard.	*	*	*			*	
60. The consonant <u>q</u> always appears with the vowel <u>u</u> and together they make the following sounds	*					*	
<u>qu</u> as <u>k</u> in <u>antique</u>	*					*	
<u>qu</u> as <u>kw</u> in <u>queen</u>	*		*			*	

TABLE III (continued)

RULE	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
61. The letter <u>x</u> has sounds that are represented by other letters							
<u>x</u> as <u>z</u> in <u>xylophone</u>	*						
<u>x</u> as <u>ks</u> in <u>sox</u>	*						
<u>x</u> as <u>gz</u> in <u>exist</u>	*	*					
<u>x</u> as <u>k</u> and <u>s</u>	*	*					
62. When a single vowel in a syllable is followed by the letter <u>r</u> the letter <u>r</u> is the dominant sound and the vowel sound is influenced by it.	*	*					
The letter <u>l</u> has the same effect.		*					
The letter <u>w</u> has the same effect.		*					
63. When the letter <u>a</u> is followed by <u>ll</u> or <u>lk</u>	*						
in a syllable, the <u>a</u> represents the sound of <u>ou</u> or <u>ow</u> .	*						

TABLE III (continued)

RULE	TEXTS					
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL
64. When the letter combinations <u>gn</u> , <u>gh</u> , <u>ght</u> , <u>ld</u> <u>nd</u> follow the single letter <u>i</u> in a syllable, the <u>i</u> represents the long vowel sound.	* * * * * *					

NOTE: No utility or frequency rates or data were given for these phonic rules.
Some of the rules may be located in studies duplicated elsewhere within each text.

a. Oi and oy are diphthongs and are composed of two glided vowels which you hear.
The text incorrectly states they form a single sound.

Spache and Spache also included a means of approaching unknown words in lieu of larger lists of phonic rules.

In effect, the child, when meeting new words, would ask himself the following questions:

1. What is the sound of the first letter or blend? (This may be sufficient to trigger off or recall the entire word because of the contextual clues.)
2. What word beginning with this sound would make sense in this sentence?
3. How many vowels are there? Where are they?
 - a. If there is a vowel in the beginning or middle, try the short sound.
 - b. If there is one vowel and e at the end, try the long sound.
 - c. If there is one vowel at the end try the long sound.
 - d. If there are two vowels in the middle or at the end, try the long sound of the first vowel, except in oi, oy, ou, ew, au, aw, oo, and ow.

The authors noted that the four possibilities result in an approximately correct pronunciation of the vowel sound in better than two out of every three words. They further suggested to proceed to steps four and five if the first attempt does not result in word recognition.

4. Say the word. Do you know it? If not, try the other vowel sound.
5. Now do you know it? If not, write it down and get help later from your teacher or your dictionary. Go on with your reading.

(Spache and Spache, 1977, page 384.)

Karlin stated that he recommended the thirteen phonic generalizations presented in his text without reservation, but warned that some of them are subject to many exceptions. Karlin did not identify which rules were the ones with the exceptions. He stated rule three, found on page 182 of the Karlin text, as, "In the vowel digraphs ai, ay, ea, oe and oa, the first vowel letter is silent." Karlin offered rule thirteen, which repeats part of rule three, in this manner, "In the combination ay, the first vowel is long and the the second is silent." This rule is found on page 183 of the text. No explanation of the repetition was given. Karlin suggested that teachers use his thirteen phonic rules to help children who fail to see the relationships among words and to help children formulate their own rules and apply them to words they can recognize. He felt that this procedure seemed to be more productive than one that required children to learn rules first and then apply them.

Harris and Smith suggested that teachers memorize the five phonic rules presented within their text so that they could be recalled easily to help students experiencing difficulties decoding. They stated that these rules had high utility usage potential but gave no data to prove this statement.

Smith's text gave little attention to phonic rules and there was no listing of the topic in the index of his book. The author sought to develop a creative reading environment

to help children learn, rather than present one specific method or philosophy of reading. He cited, on page ninety-one and ninety-two of his text, that the advocates of the sight-method of beginning reading made the point that there were so many exceptions to word attack rules that children learn the rules best after they have learned to pronounce a word from memory. Smith challenged the statement that teaching components of words is a more logical approach than having children memorize words by sight. He felt that the many components or parts of words were less meaningful than the whole word. Smith felt that unless a generalization was applicable almost all of the time it was not a rule, but an exception.

Dallmann, et al. listed a number of phonic rules or generalizations which they felt to be commonly accepted as important. There was no mention of what criteria was used to determine importance or who judged the particular rules to be important. The text also suggested that teachers use the manuals accompanying basal series used in the classroom as guides in sequencing the phonic materials contained within the reading text books. Dallmann, et al. also mentioned that it was not the purpose of their text to state authoritatively what the phonic content of reading programs should be.

Although some texts mentioned using phonic rules having high utility rates, the authors did not include any utility rates for the phonic generalizations they selected to

include within their texts. Table IV demonstrates the utility rates of phonic rules which each text presented and recommended for use when children need decoding aids.

Lapp and Flood recommended the use of phonic rules having high utility rates for aids in decoding and yet suggested the use of the "Magic E" or final e rule which has a utility rate of 63 percent in the Clymer (1963) study, a 57 percent in the Bailey (1967) study and a 63 percent in the Emans (1967) study. They offered no explanation for the inclusion of this phonic generalization.

TABLE IV
UTILITY RATES RECOMMENDED AND PRESENTED AS
DECODING AIDS FOUND IN THE TEXTS

RECOMMENDED UTILITY RATES	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. The text presents phonic rules which only have a utility rate of 75% or higher				* ^a			
2. The text presents only phonic rules with a utility rate of lower than 75%.							
3. The text presents some phonic rules with utility rates above 75% and some below 75%	*						
4. The text presents as acceptable phonic rules which do not have utility rates replicated	*	*	*	*		*	*
5. The text does not list any specific phonic rules within the text					* ^b		

a. Harris and Smith present Emans' (1967a) modified phonic rules in chart form, but do not specifically recommend its total use.

b. Smith recommends phonic generalizations found in Clymer's (1963) study which have a utility of 50% or above.

Table V presents the suggested utility rates found in the seven college level texts used in this study. It includes any explanation given by the authors for the inclusion of phonic generalizations with low levels of utility. Table IV and Table V differ from each other in the fact that the texts did not always suggest and present phonic rules or generalizations with the recommended utility rates.

An overall presentation of how each text dealt with information concerning the citation of research studies for suggested phonic rules is located in Table VI and a compilation of the cited research actually referred to is found in Table VII. It was noted that although all of the examined texts were revised or published after 1975, not one text included research studies completed after 1971. Many studies completed subsequent to 1971 have formulated new phonic generalizations and have given reasons why it might be beneficial to teach phonic rules with low utility percents. Other studies have attempted to simplify and clarify existing phonic generalizations.

Each text presented future teachers with cautions concerning the use of phonic generalizations or rules. A list of these cautions was compiled and is presented in Table VIII. Each caution should be noted by futures, classroom teachers and college professors teaching reading courses, since they offer information concerning the use of phonic rules or generalizations as decoding aids.

TABLE V

SUGGESTED UTILITY RATES AND EXPLANATIONS FOR THE TEXTUAL
INCLUSION OF PHONIC RULES WITH LOW UTILITY RATES

SUGGESTED UTILITY RATES	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. The text suggests the use of phonic rules with 75% or higher utility	* a	*			* b		
2. The text suggests the use of phonic rules with utility rates lower than 75%	* a				* b		
3. The text offers no explanation for including phonic rules with utility rates lower than 75%	* a						
4. The text offers no reason as to the teaching of phonic rules with utility rates lower than 75%	*						
5. The text suggests no specific utility rates for the phonic rules suggested as decoding aids.			*	*		*	*
6. The text suggests following the advice of the basal reading series when teaching phonic rules						*	

a. Lapp and Flood suggest the use of rules having utility rates of 75% or higher, but include the Magic E rule which has a rate lower than 75%.

b. Smith suggests using rules with 50% or higher utility.

TABLE VI
BREAKDOWN OF RESEARCH CITATIONS
CONTAINED IN THE TEXTS

BREAKDOWN OF RESEARCH CITATIONS	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. Research studies presented for every phonic rule or generalization the text suggested.							*
2. Research studies presented for some of the phonic rules suggested as aids in decoding.	*	*					
3. Research studies mentioned, but not replicated within the text.			*	*	*		
4. No research studies mentioned within the text.						*	
5. Research studies mentioned and replicated, but not for the rules which the text offers as aids in decoding.	*	*					

TABLE VII
RESEARCH CITED CONCERNING
PHONIC GENERALIZATIONS

CITED RESEARCH	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Daalman ET AL	Ransom
1. Theodore Clymer, "The Utility of Phonic Generalizations In The Primary Grades." <u>The Reading Teacher</u> 16 (Jan., 1963) pp. 252- 258.	*	*		*	*		*
2. Mildred H. Bailey, "The Utility of Phonic Generalizations In Grades 1-6." <u>The Reading Teacher</u> , 20 (Feb., 1967) pp. 413- 418.	*	*		*	* ^b		* ^c
3. Robert Emans, "The Usefulness of Phonic Generalizations Above The Primary Grades." <u>The Reading Teacher</u> 20 (Feb., 1967) pp. 419-425.	*	*		*			* ^c
4. Lou Burmeister, "Vowel Pairs." <u>The Reading Teacher</u> 21 (Feb., 1967) pp. 419- 425.	*	*					

TABLE VII (continued)

CITED RESEARCH	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
5. Alvina T. Burrows and Zyra Lourie, "When Two Vowels Go Walking". <u>Reading Teacher</u> 17 (Nov., 1963), pp. 79-82.		*d					
6. Lou Burmeister, "Final Vowel-Consonant-e". <u>Reading Teacher</u> 24 (Feb. 1971), pp. 439-442.		*					
7. Carl Smith, "The Double Vowel And Linguistic Research". <u>The Reading Teacher</u> 19 (April, 1966), pp. 512-514.				*			
8. John Hay and C. Wingo. <u>Reading With Phonics</u> . New York: J.B. Lippincott Co., 1960. p. 13.				*			
9. Charles C. Fries, <u>Linguistics and Reading</u> . New York: Holt, Rinehart and Winston, Inc. 1962.				*			
10. Leonard Bloomfield and Clarence L. Burnhart, <u>A Linguistic Approach</u> . Detroit: Wayne State University Press. 1961.				*			

TABLE VII (continued)

CITED RESEARCH	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
11. Robert Emans, "The Usefulness Of Word Pronunciation Rules." Speech at AERA Convention Chicago, Ill., 1966. ^a				*			
12. Lou. E. Burmeister, "Usefulness of Phonic Generalizations." <u>Reading Teacher</u> 21 (Jan., 1966) pp. 349-356.							*

a. Subsequently written as, "When Two Vowels Go Walking and Other Such Things." Reading Teacher 21 (Dec., 1967) pp. 262-269.

b. Recommended as additional reading

c. Referred to as "other researchers" within the context, and specifically referred to in the bibliography

d. Incorrectly cited as "Burrows and Zyra" (page 378).

TABLE VIII

CAUTIONS IN THE USE OF
PHONIC RULES

CAUTIONS	TEXTS						
	Izpp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. Children may become over-reliant on phonic rules.	*						
2. Recitation of a rule does not always mean a child can apply it.	*						
3. All children may not need to memorize all of the phonic rules.	*					*	*
4. Phonic rules are only decoding aids.	*	*					
5. Phonic rules should not be taught in isolation because they are only used in applied contexts.	*				*		
6. Phonic rules are not fool proof. They are inconsistent.			*			*	*
7. Phonic rules should not be the principal mode of reading instruction.	*			*	*		

TABLE VIII ((continued))

CAUTIONS	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
8. Some phonic rules are extremely useful, but others need constant re-examination.	*			*			
9. There are a disturbing number of exceptions to almost any rule which can be framed.		*		*		*	
10. Basal reading programs have phonic rules which differ from one another.		*					
11. The criterion used to judge the usefulness of a phonic rule (the percentage of words whose pronunciation conforms to the rule) has not been proven in a scientific way.			*				
12. Not all of the formulated rules have been included in usefulness studies.			*				

TABLE VIII (continued)

CAUTIONS	Lapp & Flood	Spache & Spache	Karlin	TEXTS				
				Harris & Smith	Smith	Dallmann ET AL	Ransom	
13. Teachers should not teach exceptions to phonic rules until children have shown that they can apply them.			*					
14. Learning phonic rules is fruitless if they are used strictly without regard to meaning in context.				*				
15. Some words must be learned as sight words.				*				
16. Phonic rules should be taught as clues to unlocking the pronunciation of words--not as rules.					*	*		
17. Prolonged work on phonics taught independently, not only diverts the child from getting the meaning from the printed page, but it also reduces time for genuine reading.						*	*	

TABLE VIII (continued)

CAUTIONS	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
18. Only rules which a child will meet in beginning reading programs and which apply to the level of words a child can handle should be presented by a teacher.						*	
19. Phonic rules should be taught in a systematic manner, (from the simpler to the more complex), not the way they are listed in research studies.						*	
20. Both the inductive and the deductive methods of teaching should be used when teaching phonic rules.						*	

Ransom's text presented a list of phonic generalizations claimed to have been researched by Burmeister (1968), but did not present any data on the utility or frequency of the listed rules. Ransom noted that the rules presented within the text were usually true, but that there were exceptions to them. Table IX presents the phonic generalizations found to be useful in the cited research. It was noted that Ransom omitted several of the cited phonic rules and added others without explanation. The following generalizations are those which Ransom included in her list accredited to Burmeister (1968).

"When y is the final letter in a word, it usually has a vowel sound."

"When a is followed by r and final e we expect to hear the sound heard in care (are is an exception to the rule and is to be learned as a sight word.)"

"When c and h are next to each other they make only one sound."

"When a word begins with kn, the k is silent."

"When a word begins with wr, the w is silent."

(Ransom, 1978, page 259)

None of these generalizations were found to be located in the Burmeister (1968) study.

TABLE IX
PHONIC RULES CONSIDERED ESPECIALLY USEFUL
BY BURMEISTER (1968)

BURMEISTER'S RULES	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
1. C followed by e, <u>i</u> or <u>y</u> sounds soft, otherwise <u>c</u> is hard (omit <u>ch</u>).							* <u>u</u>
2. G followed by e, <u>i</u> , or <u>y</u> sounds soft, otherwise <u>g</u> is hard (omit <u>gh</u>).							* <u>u</u>
3. Ch is usually pronounced as it is in <u>kitchen</u> , not <u>sh</u> as in machine.							* <u>u</u>
4. When a word ends in <u>ck</u> , it has the same last sound as in <u>book</u> .							*
5. When <u>ght</u> is seen in a word <u>gh</u> is silent.							*
6. When two of the same consonants are side by side, only one is heard.							*
7. If the only vowel letter is at the end of a word, the letter usually stands for a long sound (one syllable words only).							* <u>LL</u>

TABLE IX (continued)

BUNMEISTER'S RULES	TEXTS						
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL	Ransom
8. When consonant <u>ty</u> are the final letters in a one syllable word, the <u>y</u> has the long <u>i</u> sound; in polysyllabic words the <u>y</u> has a short <u>i</u> (long e) sound.							
9. A single vowel in a closed syllable has a short sound except that it may be modified in words which the vowel is followed by an <u>r</u> .							
10. The <u>r</u> gives the preceding vowel a sound that is neither long nor short.							*
11. When a word ends in vowel-consonant- <u>e</u> , the <u>e</u> is silent and the vowel may be long or short.							
12. When the following double vowel combinations are seen together the first is usually long and the second is silent: <u>ai</u> <u>ay</u> <u>ea</u> <u>ee</u> <u>oa</u> <u>ow</u> (<u>ea</u> may also have a short sound) (<u>ow</u> may have an <u>ou</u> sound).							* *

TABLE IX (continued)

BURMEISTER'S RULES	TEXTS					
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Smith	Dallmann ET AL
13. The following double vowel combinations usually blend: <u>au</u> <u>aw</u> <u>ou</u> <u>oi</u> <u>oy</u> <u>oo</u> (<u>oo</u> has two common sounds)						
14. <u>io</u> and <u>ia</u> after <u>c</u> , <u>t</u> , or <u>s</u> help to make a consonant sound.						
15. When the single vowel <u>i</u> is followed by the letters <u>gh</u> , the <u>i</u> usually has the long sound and the <u>ch</u> is silent.						

a. These two rules are combined in the Ransom text.

b. Ransom uses the words "check" and "much" and not kitchen. She eliminates the word machine and just presents the letter combination sh.

Table X presents an attempt to rate the texts according to their presentation of useful phonic generalizations which had research citations presented along with them. The Smith text was not included in Table X because it did not present any specific phonic rules but suggested that its readers use the phonic rules with a 50 percent or higher utility rate found in the Clymer (1963) study.

The Ransom text was also eliminated from Table X even though nine of the fourteen rules found in the text were supported by cited research. Approximately 64 percent of the phonic rules were supported by the Burmeister (1968) study. It appeared that Ransom misleads her readers into thinking that all of the suggested phonic generalizations found in her text were included in the Burmeister (1968) study. It was found that five rules, or approximately 36 percent of those presented phonic generalizations were not located in that study and Ransom does not acknowledge this fact. Therefore, it seemed inappropriate to rate the Ransom text "Adequate" or "Good" under these particular conditions.

All of the other five texts qualified for a "Poor" rating. None of these texts cited any research studies to support the inclusion of their selected phonic rules.

TABLE X

RATINGS ASSIGNED TO EACH TEXT BASED ON THE PRESENTATION OF
RESEARCH FOUND SUPPORTING THE USEFULNESS OF
PHONIC RULES WITHIN
EACH TEXT

	TEXTS				
	Lapp & Flood	Spache & Spache	Karlin	Harris & Smith	Dallmann ET AL
SUPERIOR					
GOOD					
ADEQUATE					
POOR	*	*	*	*	*

NOTE: The Smith text and the Ransom text were omitted from this table.

KEY:

SUPERIOR: 90% or more of the phonic rules presented in the text are supported by cited research.

GOOD: Between 50% and 90% of the phonic rules presented in the text are supported by cited research studies.

ADEQUATE: At least 50% of the rules presented in the text are supported by cited research studies.

POOR: Less than 50% of the generalizations presented are backed by cited research studies.

CHAPTER V
SUMMARY AND CONCLUSIONS
RESTATEMENT OF THE PROBLEM

Are undergraduate level elementary teacher training texts adequately preparing future teachers to make appropriate decisions pertaining to the teaching of phonic generalizations as word attack methods?

DESCRIPTION OF PROCEDURES USED

Several basal series teacher's manuals were examined to establish the fact that many phonic generalizations are presented as decoding aids, but that research studies supporting their value are omitted. The discovery of this led to the examination of seven undergraduate level college texts used in teacher preparation courses in the teaching of Reading in the elementary grades. The texts were examined for the inclusion of phonic rules. Some of the rules were then compared with the studies of Clymer (1963), Bailey (1967), Emans (1967, 1967a) and Burmeister (1968). Phonic rules suggested for use by each text were compiled and presented in tabular form, as were any research study citations, cautions and any utility percents recommended and presented by the authors of the texts used in this study.

PRINCIPAL FINDINGS AND CONCLUSIONS

The study revealed that only two texts, Lapp and Flood and Spache and Spache, attempted to include the landmark studies of Clymer (1963), Bailey (1967) and Emans (1967). The Harris and Smith text was the only text to include the modified generalizations proposed by Emans (1967a) and the Ransom text cited Burmeister (1968).

Each text, with the exception of the Smith text, presented a number of phonic rules to be used when helping children pronounce and decode unknown words. Not one text gave any utility or frequency data supporting the usefulness of each of the presented phonic rules found in the texts.

Six texts did not cite research for each specific rule presented. Ransom cited research for nine of the fourteen rules presented in her text. Many of the phonic rules or generalizations presented in the texts and suggested as valuable decoding aids were found to be very similar, but not exactly the same as those located in some of the other texts used in this study.

Notation was made of the fact that not all of the texts recommended the same rate of utility as a criterion for teaching a phonic rule. Two of the texts suggested using phonic generalizations with utility rates of 75 percent or better and one text suggested using rules with a 50 percent or better utility. Four of the texts did not suggest using

any stated percent of utility rate.

The Ransom text stated that it presented research citations for every phonic generalization it presented as useful.. It was noted that five of the phonic rules were not supported by research and were not located in the Burmeister (1968) study. Two texts presented some research citations concerning phonic generalizations; three texts mentioned research studies but did not include them. One text did not mention any research studies concerning the topic of phonic generalizations.

The most current research study included in any of the texts was located in the Spache and Spache text and consisted of the study completed by Burmeister in 1971. No research studies presented after 1971 were included in any of the seven texts even though none of the texts examined was revised or published any earlier than 1975. Five texts cited the Clymer (1963) study, five texts cited the Bailey (1967) study and four texts cited the Emans (1967) study. Two texts cited the Burmeister (1968) study while none of the following research studies was located in more than one text each: Burrows and Lourie (1963), Burmeister (1971), Smith (1966), Hay and Wingo (1960), Fries (1962), Bloomfield and Burnhart (1961) and Emans (1967a).

All seven texts noted cautions in the use of phonic rules and a list of twenty cautions was presented in the study. Only three of the same cautions were noted by three

texts and four of the same cautions were noted by two texts. The remaining thirteen cautions were each cited without repetition, in the examined texts.

Five of the seven texts were rated as to the presentation of cited research supporting the value or usefulness of the selected phonic rules included in each text. All of the texts qualified for a "Poor" rating. The Smith and Ransom texts were omitted from the ratings.

It was concluded, from the interpretation of the data collected, that college level texts used in the preparing of future reading teachers on the elementary level are not adequately presenting research in the use of phonic rules or generalizations as methods of word attack.

LIMITATIONS OF THE STUDY

This study did not examine or include generalizations used to determine syllabication and accent.

Not more than one text per course was examined in this study.

This study in no way attempted to judge or examine the university, college or professor teaching the course using one of the selected texts.

There were only seven colleges and universities selected for examination in this study and they were all located in

the New York City Metropolitan area.

There were no norms against which this study could be evaluated, nor were there any reliability criteria to compare with this study. The study, however, had content validity.

RECOMMENDATIONS FOR FURTHER RESEARCH

Since there were only seven New York City Metropolitan area colleges and universities included in this study, it is recommended that additional texts from other areas of the country be examined.

It is recommended that research be completed to establish some agreement as to the wording of certain phonic rules which are presented in similar form in several texts.

Since several of the texts used in this study did not cite or mention current research supporting the use or non-use of phonic generalizations, it is recommended that some form of survey or periodic checking of college level texts be undertaken.

Unless the colleges using the selected texts employ additional materials concerning phonic generalizations, the criticisms made in 1975 by Mazurkiewicz (1975a) might well be repeated today. The findings of this study indicated that some college texts persist in stressing poor, if not incorrect phonic generalizations. A further indication suggested that several college level texts do not present current research information concerning phonic rules. Lamentably, such

complaints are identical to those voiced five years ago.

Hopefully college professors using these texts realize the existing shortcomings and supplement course material with current research information concerning phonetic rules or generalizations.

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APPENDIX A

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